



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,905	07/11/2003	Eckhard H. Kuesters	239274US20DIV	2522
22850	7590	12/09/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PANOS, JEFFREY C	
		ART UNIT		PAPER NUMBER
				3713

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/616,905	KUESTERS, ECKHARD H.
	<b>Examiner</b>	<b>Art Unit</b>
	Jeffrey C. Panos	3713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/13/05; 9/17/04; 7/11/03</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 January 2005 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The Specification does not designate what the "predetermined time" is after actuation of the switching device therefore it is not enabled. The predetermined time period spoken of in the Applicant's claims and Specification does not reflect a specific or singular predetermined time period. The Applicant put a significant amount of stress on

this; even though the disclosure gives examples with example time periods, there is not one predetermined time period enabled. For example, claim 2 states, "a timer configured to turn the transmitter on upon actuation of the switching device and to turn the transmitter off a predetermined time after actuation of the switching device." This does not mean " 'a few seconds,' or perhaps '20 seconds' " as was argued. The claim does not state one of many predetermined time periods randomly selected by the device. Therefore, appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Englmeier (US Patent No. 5,423,549) in view of Barnhill (US Patent No. 5,112,055) and in further view of Stoffer (US Patent No. 5,463,376).

Englmeier discloses a golf ball with a spherical shaped body having a dimpled outer surface (FIG 3) that has a power source contained within the body (FIG 3). There is a transmitter coupled to the power source that emits an electromagnetic signal (Abstract). Stoffer discloses a timing device capable of being configured to control transmission of the signal for a predetermined time after actuation (column 5, lines 41-67). However, Englmeier does not disclose a switching device contained within the body that actuates due to a detected shock.

One skill in the art would know that when transmitting signals relaying the location of an object, it would be strongly desired to transmit only when necessary as to not waste current, power, or overall capacity of energy.

Englmeier supports this fact in applying it to the tracking of golf balls in stating that a pulsed transmission signal is used for the purpose of energy saving and this switching transistor is controlled by the clock pulses generated by this control unit (column 5, lines 60-65).

In incorporating this energy saving mechanism, Englmeier discloses a transmitter that can be turned on and off by a timer circuit taught by Stoffer (column 5, lines 41-67) in order to limit the time during which the ball transmits. Further, a second timer circuit delaying the transmission for a predetermined amount of time is just a Duplication of Parts (MPEP § 2144), which is duplicated from the timer circuit taught by Stoffer. Duplication of Parts states, "*In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The

claimed water seal has a "web" which lies \*\* in the joint, and a plurality of "ribs" \*\* >projecting outwardly from each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.)." Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Englmeier by providing the timer circuit taught by Stoffer to have a more specific predetermined time period for which the signal is transmitted so that it may save energy.

However, transmission is wasted in Englmeier as transmission starts when the ball is removed from the charger, thus resulting in transmission when the ball is not in use. Englmeier lacks a means to enable the transmitter based upon a shock initialization to indicate that the ball is in use. Barnhill teaches a shock-activated device within a golf ball to begin transmission upon impact, thus limiting any transmission before the ball is in play.

Based upon the energy-saving transmission teachings of Englmeier, Barnhill, and Stoffer, it would have been obvious to one skilled in the art at the time of the invention to save transmission time and energy by incorporating a means to automatically turn on the transmission upon impact and to disable the transmission after a certain time (taught by Stoffer) thus using the shock teachings of Barnhill to improve

on the energy saving clocking of Englmeier by providing a more accurate indication of when the ball is in use, thus maximizing the potential to save energy.

Regarding claim 2, the combination of Englmeier, Barnhill, and Stoffer discloses a timer configured to turn on a based on the actuation of a switching device and turn off based upon a predetermined time.

Regarding claim 3, Englmeier discloses a transmitter that can be turned off by a timer circuit taught by Stoffer (column 5, lines 41-67), which is capable of limiting the time during which the ball transmits. Further, a second timer circuit delaying the transmission for a predetermined amount of time is just a Duplication of Parts (MPEP § 2144), which is duplicated from the timer circuit taught by Stoffer. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Englmeier by providing the timer circuit taught by Stoffer to have a more specific predetermined time period for which the signal is transmitted so that it may save energy.

Regarding claim 4, the combination of references does not include at least one light emitting diode; however, the usage of such would be a design choice obvious to one of ordinary skill in the art. The incorporation of a light would not change the functionality of the transmitter and thus would be merely representative of a design wherein one of ordinary skill in the art would be motivated by the specifications for their system. These specifications motivate the designer based on the wants, needs, and desired for their system. One would be motivated to use a light, for example, to aid a user in locating the ball at dusk conditions when playing golf is still possible, but locating

the ball becomes more of a challenge. Thus, by incorporating a light, a skill artisan would recognize the advantage to the user in terms of finding their ball and would be motivated by such in order to further supplement the users ability to find their ball as is the goal of both of the references.

Regarding claims 5-8 and 14-16, Englmeier discloses the transmitter emits frequencies to detect the golf ball and has the ability to detect different balls based on the signal associated with the ball. Englmeier also discloses a modulator capable of using a coded charge signal (for example pulse code modulation) in order to modulate the signal with player ID information in order for the user to be able to detect their ball (column 5, lines 25-50).

Regarding claims 9 and 17, Englmeier discloses the power signal to be rechargeable (column 2, lines 28-33).

Regarding claims 10-11 and 18-19, the outer cover is partially transparent to the electromagnetic signal as the signal is transmitted through it (FIG 3).

### ***Response to Arguments***

Applicant's arguments, see parts A, B, and C, filed 10 November 2005, with respect to claims 1, 2, and 3 have been fully considered and are persuasive. The rejection regarding the timer circuit of claims 1, 2, and 3 has been withdrawn. However,

the Examiner introduces new prior art that teaches this timer circuit and is discussed in the Rejections.

Applicant's arguments filed 10 November 2005 not regarding the timer circuit in claims 1, 2, and 3 have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant's contentions that Englmeier's transmission signal is continuous and not for a predetermined time in reference to their invention is not persuasive enough and is respectfully disagreed with by the Examiner. The predetermined time period spoken of in the Applicant's claims and Specification do not reflect a specific or singular predetermined time period. The disclosure gives examples with example time periods, but not one predetermined time period. For example, claim 2 states, "a timer configured to turn the transmitter on upon actuation of the switching device and to turn the transmitter off a predetermined time after actuation of the switching device." This does not mean "'a few seconds,' or perhaps '20 seconds' ". The claim does not state one of many predetermined time periods randomly selected by the device.

Applicant argues that the prior art Barnhill teaches away from a ball, which radiates electromagnetic energy. The Examiner respectfully disagrees and would like to point out that the Applicant's reasons that Barnhill teaches away were quoted from section III. PRIOR ART HELPS TO SHOW INVENTIVENESS HERE. This section "shows in a plurality of ways the non-obviousness of the present invention...". Therefore, the arguments used along with the case *Winner International Royalty Corp. v. Wang*, 53 USPQ2d 1580, 1586-1587 (Fed. Cir. 2000) are completely irrelevant.

Applicant contends that "the combination of references does not include at least one light emitting diode." The Examiner respectfully disagrees with this contention. This is a design choice because it does not change the functionality of the transmitter and Applicant has not disclosed that the LED provides an advantage, is used for a particular purpose, or solves a stated problem.

Applicant contends that the prior art teaches away from "an outer cover at least partially transparent to the electromagnetic signal." The Examiner respectfully disagrees. If the electromagnetic signal is emitted through the cover of the ball then it is obvious that the cover is *at least partially transparent to the signal*, otherwise, the signal would not pass.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the rejection clearly explains the motivation for combining the reference.

### **Conclusion**

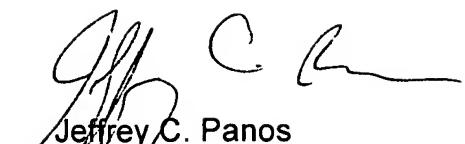
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,743 815 teaches a golf ball with transmission means encased within the outer shell.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Panos whose telephone number is (571) 272-6136. The examiner can normally be reached on M-F 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey C. Panos  
November 15, 2005  
Art Unit 3713



XUAN M. THAI  
SUPERVISORY PATENT EXAMINER  
TC3702